

Amendment Dated January 7, 2008  
Serial No. 10/777,697

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IN THE CLAIMS

Claim 1. (Currently Amended) A method of facilitating the transmission of medical images on a network, the method comprising the steps of:

receiving a transaction request, ~~said transaction~~ relating to the delivery of at least one medical image from a data source to a data target on a network;

interfacing the data source and data target to coordinate delivery between the data source and data target;

scheduling the transaction request for delivery of the medical image between the data source and the data target on the network;

reserving network resources for transaction request on the network for the delivery of the medical image over the network from the data source to the data target;

monitoring the delivery of the medical image over the network; and

adjusting the steps of scheduling and reserving if necessary to accommodate higher priority transaction requests and network conditions.

Claim 2. (Original) The method of claim 1, wherein the step of scheduling comprises understanding a work flow of transactions on the network.

Claim 3. (Currently Amended) The method of claim 2, wherein the step of understanding the work-flow comprises anticipating upcoming transaction requests from ~~at least one of~~ other transaction requests, statistics, and or transaction patterns.

Claim 4. (Currently Amended) The method of claim 1, wherein the step of scheduling comprises ascertaining a relative priority of the transaction request compared to other transaction requests, and wherein the step of adjusting comprises re-scheduling delivery of the medical image upon receipt of a higher priority request for a medical image to thereby enable prioritization of medical image delivery on the network.

Claim 5. (Original) The method of claim 4, wherein ascertaining a relative priority comprises implementing a network policy.

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Claim 6. (Currently Amended) The method of claim 5, wherein the network policy sets the relative priority of transaction requests based on the time of day, who issued the transaction request, where the transaction request was issued, and why the transaction request was issued.

Claim 7. (Original) The method of claim 4, wherein ascertaining a relative priority comprises determining, from the transaction request, who issued the transaction request, where the transaction request was issued, and why the transaction request was issued.

Claim 8. (Original) The method of claim 4, wherein the step of scheduling comprises adjusting a schedule of the other transaction requests.

Claim 9. (Original) The method of claim 1, further comprising generating a histogram of traffic patterns on the network on at least one of a daily and weekly basis.

Claim 10. (Original) The method of claim 4, wherein the step of scheduling comprises scheduling the transaction request to occur at a point in the future.

Claim 11. (Original) The method of claim 10, wherein the transaction request specifies a requested timing, and wherein the requested timing is under-constrained.

Claim 12. (Original) The method of claim 1, further comprising the step of coordinating with a data source to transmit data over the scheduled resources.

Claim 13. (Original) The method of claim 1, wherein the step of reserving network resources comprises setting a class of service for the transaction request.

Claim 14. (Original) The method of claim 1, wherein the step of reserving network resources comprises interfacing with network elements to allocate at least one of a route and a path through the network.

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Claim 15. (Original) The method of claim 14, wherein the step of reserving network resources further comprises reserving bandwidth on the allocated route or path.

Claim 16. (Currently Amended) The method of claim 1, wherein the step of reserving network resources comprises rate-limiting medical image sourcing applications to prevent the medical image sourcing applications from transmitting data medical images on the network.

Claim 17. (Currently Amended) A medical image transport service configured to facilitate and coordinate the transmission of a medical image from a data source to a data target on a network ~~schedule network resources on a switched underlay network~~, comprising:

a data management service, ~~said data management service being configured~~ to perform network topology discovery, ~~route creation~~, and path allocation, control the data source and data target, and schedule transmission of a medical image from the data source to the data target; and

a network resource manager, ~~said network resource manager being configured~~ to interface network devices in the ~~switched underlay network~~ to schedule reserve network resources on the switched underlay network for the transmission of the medical image from the data source to the data target based on the path allocation and schedule determined for the transmission of the medical image by the data management service.